

Administrative
Services
Letter

10-06
Heat Illness Prevention
Program



Signed By	/s/ Marie Stephans, Chief Administrative Services Division	Number	10-06
Distribution	All Employees	Date Issued	April 7, 2010
Subject	Heat Illness Prevention Program	Expires	When Canceled
Guide Section	Health and Safety	Reference	CCR, Title 8, Section 3395 Labor Code 2440; 2441 Cancels ASL 07-01

The California Occupational Safety and Health Act (Cal/OSHA) requires employers to take preventative measures to control the risk of heat illness in employees working outdoors or in non air conditioned facilities when environmental and personal risk factors for heat illness are present.

In keeping with the Air Resources Board's (ARB) Injury and Illness Prevention Program, our employees' health and well-being shall be considered of primary importance in all phases of operations. This [Heat Illness Prevention Program](#) outlines ARB's continuing commitment to ensure the overall health and safety of our employees.

Managers and supervisors should purchase bottled water in bulk through the procurement process or make other provisions for adequate cool drinking water when environmental and personal risk factors for heat illness are present, as described in this program.

If you have any questions or need assistance regarding this program, please contact ARB's Health and Safety Officer at (916) 323-1158.

HEAT ILLNESS PREVENTION PROGRAM

Purpose and Objective

The Heat Illness Prevention Program (HIPP) serves to control the risk of occurrence of heat illness in outdoor places and in facilities which are not air conditioned, and establishes the minimum requirements for complying with this program. The objectives of the program are employee awareness regarding heat illness, ways to prevent heat illness, and what to do if symptoms of heat illness occur.

Responsibilities

The Health and Safety Officer shall:

- Develop and administer a written program in compliance with Cal/OSHA requirements;
- Provide and coordinate Heat Illness Prevention training for affected managers and supervisors;
- Assist affected managers and supervisors with the required training component of this program by providing Heat Illness Prevention training materials for use by their affected staff.

Managers and supervisors shall:

- Implement Heat Illness Prevention when environmental and/or personal risk factors for heat illness are present;
- Identify employees who are or may be required to work outdoors or in non-air conditioned buildings when heat illness is likely to occur;
- Ensure that all affected employees receive training on heat illness prevention including proper medical response procedures for each work site. Such training shall be provided at least annually and before entering work sites where environmental and personal risk factors for heat illness may be present;
- Ensure that time is allowed for affected employees to acclimate, when necessary, to work sites where environmental and personal risk factors for heat illness may be present;
- Ensure adequate water and shade is made available to employees at job sites when environmental and personal risk factors for heat illness are present;
- Encourage employees to drink adequate amounts of water when risk factors for heat illness are present; and
- Ensure the basic requirements of this program are met.

Employees shall:

- Comply with the Heat Illness Prevention Program guidelines when environmental and/or personal risk factors for heat illness are present;
- Utilize information provided annually in Heat Illness Prevention training;
- Consume adequate amounts of drinking water at the beginning of each shift and throughout the work shift when environmental and personal risk factors for heat illness are present;
- Utilize shade as needed for a preventative recovery period when environmental and personal risk factors for heat illness are present;

- Recognize the signs and symptoms of heat illness and immediately report personal occurrences of heat related illness or a co-worker exhibiting heat illness symptoms to supervisors and/or managers; and
- Follow proper procedures to contact emergency medical services when necessary.

Compliance Strategy

Supervisors and managers shall ensure compliance with CCR, Title 8, Section 3395 by adhering to the following basic requirements of the HIPP.

Managers and supervisors shall ensure that they are aware of the ambient temperature and relative humidity in areas where employees will be working. The manager/supervisor shall implement the proper controls when local weather conditions have achieved, or are expected to achieve, the following threshold: more than 48 hours with daytime temperatures at or above 90°F.

Under these conditions, the manager/supervisor shall implement the following worker protection controls.

- Prior to the start of the work shift, when weather conditions require the application of the HIPP, managers/supervisors shall meet with their employees, and review the work procedures to be used during the high heat period.
- Managers/supervisors shall ensure that exposed employees have access to cool drinking water. Water must be provided to employees at the beginning of the work shift in sufficient quantities to ensure that employees can consume one quart of water per hour (the equivalent of 2 gallons per 8 hour work shift).
- Employees may be provided with smaller quantities of water at the beginning of their shift if provisions are made to supply one quart of water per hour per employee throughout the work shift.
- An employer is out of compliance if at any time drinking water is not available to employees, or if the practice is to wait until all drinking water is gone to replenish it. It is similarly impermissible for an employer to replenish the drinking water supply only when requested by employees.
- Managers/supervisors shall encourage frequent drinking of water by employees. The importance of this cannot be overstated. Employees are there to work, and many of them may not feel how urgently their bodies need water. This is an unfortunate but preventable cause of heat illness.
- Preventing heat related illness in employees is preferable to responding to a victim of heat illness. Therefore, it is very important to "pre-hydrate" prior to beginning work in a high heat environment. If possible, employees should consume at least one bottle of water, or 2 cups, before beginning work in a high heat environment.
- Managers/supervisors shall ensure that employees assigned work outdoors and exposed to high temperatures shall have quick and effective access to a rest area where shade is available, or to an area where ventilation or cooling is provided for a period of not less than 5 minutes. Employees shall have access to shade or cooling at all times during the work shift.
- Employees suffering from heat illness or believing a preventative recovery period is needed shall be provided access to shade for a period of no less than five minutes.

Training

Training on the following topics shall be provided to all affected employees:

- Air Resources Board's guidelines for Heat Illness Prevention;
- The environmental and personal risk factors for heat illness;
- The importance of frequent consumption of small quantities of water;
- The importance of acclimating to the environment;
- How to recognize types, signs, and symptoms of heat illness;
- The importance of immediately reporting occurrences of heat illness; and
- How to respond to staff affected by heat illness, contact emergency medical services, and effectively report work location to 911 (emergency medical responders).

Training on the following topics shall be provided to all affected supervisors prior to supervising employees working when environmental or personal risk factors for heat illness may be present:

- The training provided to all affected employees;
- Procedures supervisors shall follow to implement the Heat Illness Prevention Program;
- Procedures supervisors will follow when possible heat illness symptoms occur in an employee, how to respond to staff affected by heat illness, and how emergency medical services will be summoned in an emergency; and
- How to effectively report staff's work location to 911.

Record Keeping

A record of training given to employees and supervisors shall be maintained. All employees receiving Heat Illness Prevention (HIP) training shall complete the Training Acknowledgment Form at the end of the HIP training module. Upon completion of the annual training, the Training Acknowledgment Form shall be forwarded to the ARB Health and Safety Officer for retention. A copy shall be given to the supervisor and a copy retained by the employee. Such records shall be maintained for a minimum of two years.

Definitions

Acclimatization – The gradual process of the body becoming accustomed to a different climate, such as heat, through normal physiological changes. Acclimatization peaks in most people within four to fourteen days of regular work in the heat for at least two hours per day.

Environmental Risk Factors for Heat Illness – Working conditions that create the possibility that heat illness could occur, including air temperature, relative humidity, radiant heat from the sun and other sources, conductive heat sources such as the ground, air movement, workload severity and duration, clothing, and personal protective equipment worn by employees.

Heat Illness – A serious medical condition resulting from the body's inability to cope with a particular heat load, and includes heat cramps, heat exhaustion, heat syncope, and heat stroke.

Personal Risk Factors for Heat Illness – Factors such as an individual's age, degree of acclimatization, health, water consumption, alcohol consumption, caffeine consumption, and use of prescription medication that affects the body's water retention and other physiological responses to heat.

Preventative Recovery Period – A period of time, not less than 5 minutes, spent in the shade by an employee who believes they are experiencing heat illness.

Shade – The blockage of direct sunlight. Canopies, umbrellas and other temporary structures or devices may be used to provide shade. Shade is not adequate when heat in the area of shade defeats the purpose of shade, which is to allow the body to cool. For example, a car sitting in the sun does not provide acceptable shade to a person inside it, unless the car is running with air conditioning.